

Application Serial No. 10/518,890
Amendment dated May 21, 2007
Reply to Office Action of September 22, 2006, and
Notice of Appeal filed February 22, 2007

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-9 (canceled)

Claim 10 (previously presented): The method according to Claim 13, characterized by having the query of the HLR use an SS7 channel.

Claim 11 (canceled)

Claim 12 (currently amended): A system to handle short messages under phone number portability between multiple telecommunications networks, where the phone numbers do not permit an unambiguous linkage of the user to a specific telecommunication network and where several attempts at delivery of the short messages are possible, and where the parameters or data required for delivery of the short message are determined during the first attempt at delivery, said system comprising:

means for determining parameters or data required for the delivery of a short message from a sending entity to a recipient by determining the relevant home register HLR for the recipient and then generating a routing inquiry to the relevant HLR;

the relevant HLR including means for responding to the inquiry by returning parameters or data for delivery;

means for performing a first attempt at delivery based on the parameters or data required for delivery;

means for temporarily storing in a short message service center SMSC in the sending network that is involved in the transaction the short message to be delivered and the parameters or data required for delivery including the HLR address of the relevant home register HLR containing the required parameters or data obtained during the first attempt at delivery;

in the situation where the short message was not delivered successfully, means for performing at least a subsequent attempt at delivery by retrieving the message and the parameters or data required for delivery stored in the SMSC, including said relevant HLR address which is already stored in the SMSC, and interrogating directly said relevant HLR;

storage space reserved to store all or part of the parameters or data relating to the first attempt at delivery in the short message service center (SMSC) involved in the transaction, where such storage space is associated with a temporary storage location housing the short message to be delivered, and where the stored parameters or data required for delivery are stored for use at least in part in subsequent attempts at delivery; and

means for erasing from the short memory service center SMSC the short message and ~~the parameters and the~~ said parameters or data required for delivery when the short message is delivered successfully.

Claim 13 (currently amended): A method for handling short messages under phone number portability between several communications networks, where the phone numbers do not permit an unambiguous linkage of the user to a specific telecommunication network, comprising the steps of:

determining parameters or data required for the delivery of a short message from a sending entity to a recipient by determining the relevant home register HLR for the recipient and then generating a routing inquiry to the relevant HLR;

the relevant HLR responding to the inquiry by returning parameters or data for delivery;

performing a first attempt at delivery based on the parameters or data required for delivery;

temporarily storing in a short message service center SMSC in the sending network that is involved in the transaction the short message to be delivered and the parameters or data required for delivery including the HLR address of the relevant home register HLR containing the required parameters or data obtained during the first attempt at delivery;

if the short message was not delivered successfully, performing at least a subsequent attempt at delivery by retrieving the message and the parameters or data required for delivery

stored in the SMSC, including said relevant HLR address which is already stored in the SMSC, and interrogating directly said relevant HLR; and

if the short message is delivered successfully, erasing from the short message service center SMSC the short message and ~~[[the]]~~ said parameters or data required for delivery ~~from the SMSC~~.

Claim 14 (currently amended): A method for handling short messages under phone number portability between several communications networks, where the phone numbers do not permit an unambiguous linkage of the user to a specific telecommunication network, comprising the steps of:

determining parameters or data required for the delivery of a short message from a sending entity to a recipient by determining the relevant home register HLR for the recipient and then generating a routing inquiry to the relevant HLR;

the relevant HLR responding to the inquiry by returning parameters or data for delivery;

performing a first attempt at delivery based on the parameters or data required for delivery;

temporarily storing in a short message service center SMSC in the sending network that is involved in the transaction the short message to be delivered and the parameters or data required for delivery including the HLR address of the relevant home register HLR containing the required parameters or data obtained during the first attempt at delivery;

if the short message was not delivered successfully, performing at least a subsequent attempt at delivery by retrieving the message and the parameters or data required for delivery stored in the SMSC, including said relevant HLR address which is already stored in the SMSC, and interrogating directly said relevant HLR;

if the short message is delivered successfully, erasing from the short memory service center SMSC the short message and ~~[[the]]~~ said parameters or data required for delivery ~~from the SMSC~~;

when performing the first attempt at delivery, transferring the short message to a mobile number portability signaling relay function MNP-SRF network element whereupon an

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inquiry of one or more databases is conducted to determine the network of the recipient, and
sending routing information for the recipient to relevant HLR; and

when performing subsequent attempts at delivery, transfer to the MNP-SRF network
element is bypassed and said relevant HLR is interrogated directly.